REMARKS

Applicants thank the Examiner for participating in the telephone interview of September 19, 2011. The following remarks encompass Applicants' interview summary.

Claims 1-8 remain pending in the application, and based on the discussions during the telephone interview, independent claims 1, 6, and 8 have been amended. Support for the claim amendments may be found in the application at least at paragraphs [0153-0156] of the published version of the application (Publication No. 2007/0286046). Pursuant to the Examiner's instructions during the telephone interview, a Request for Continued Examination (RCE) is being submitted herewith to obtain entry and consideration of the claim amendments.

Favorable reconsideration of the application is respectfully requested in view of the claim amendments and following remarks.

I.   Current Claim Amendments

As discussed during the telephone interview, the claimed invention pertains to a pseudo-overwrite operation exemplified by step (f) of instructing the drive apparatus to write at least a part of the updated metadata *to the location from which the metadata is read* in the step (b) in the write-once disc. In accordance with the discussions during the telephone interview, independent claim 1 has been amended to clarify the claimed pseudo-overwrite operation, including further recitation as part of step (f) the recording of the updated metadata at the second next writable address to complete the pseudo-overwrite operation, and the addition of a new step "(g)" pertaining to the updating of a remapping table to specify the writing location for the pseudo-overwrite operation.

In particular, independent claim 1 has been amended to recite in pertinent part:

> (f) instructing the drive apparatus to write at least a part of the updated metadata to the location from which the metadata is read in the step (b) in the write-once disc, wherein the drive apparatus obtains a second next writable address and when the location from which the metadata is read is smaller than the second next writable address, records the updated metadata at a location indicated by the second next writable address, and

> (g) updating a remapping table to include an entry which
> specifies a physical address corresponding to the location from which
> the metadata is read and a new physical address where the updated
> metadata is written.

Comparable amendments have been made to independent claims 6 and 8

The amended claims recite the additional features of recording the updated metadata after receiving an instruction to record the updated metadata to the ***same location from which it was read,*** i.e., a pseudo-overwrite operation. Additionally, the amended independent claims recite the supporting technical features used to perform the referenced pseudo-overwrite operation, including comparing the size of the logical address of the metadata with the size of the next writable address (NWA), and updating a mapping table to reflect the change in logical address. The references cited by the Examiner do not disclose or suggest such features.

II.   *Claim Rejections Based on Takano*

Comparably to the previous Office Action, claims 1, 4-6, and 8 stand rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by Takano et al., U.S. Patent No. 5,448,728 (Takano). The other claims stand rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Takano by itself. Indeed, aside from a brief Response to Arguments section (see Final Office Action at page 2), the rejection of independent claims 1, 6, and 8 essentially is verbatim to the previous Office Action.

As discussed during the telephone interview, principal reference Takano does not disclose or suggest a pseudo-overwrite operation ***at all***. It follows that Takano does not disclose or suggest claim step (f) of instructing the drive apparatus to write at least a part of the updated metadata ***to the location from which the metadata is read*** in the step (b) in the write-once disc. Rather, in Takano the writing instruction is to write the purported updated metadata into an unrecorded area different from the location from which the metadata is read. In accordance with the discussions during the telephone, to further clarify the claimed pseudo-overwrite operation and distinguish Takano, the step (f) has been amended to further recite the recording of the updated metadata at the second next writable address to complete the pseudo-overwrite operation, and step (g)

has been added to recite the updating of the mapping table associated with the pseudo-overwrite operation. The Examiner agreed during the telephone interview that such clarifications distinguish Takano.

More specifically, Takano discloses no details as to what instructions are given to write the metadata. As such, Takano is properly interpreted as conforming to the conventional manner of instructing data to be recorded in the next unrecorded area being utilized. This is in contrast to the claimed pseudo-overwrite operation (an overwrite operation in which a replacement operation is used to write data into an unrecorded area in response to an instruction to write the data into an already recorded area), which allows a recording instruction to an already recorded address.

For these reasons, Takano does not disclose or suggest features recited in amended independents claims 1, 6, and 8. Accordingly, Takano does not anticipate the independent claims, and the dependent claims are patentable for at least the same reasons. The rejections, therefore, should be withdrawn.

III.   *Consideration of Williams*

Although not part of the current rejections, during the telephone interview the Examiner identified an additional reference that he considers pertinent to the claimed invention: Williams, U.S. Patent No. 4,953,122 (Williams). Williams purports to disclose a "pseudo-erasable and rewritable write once" optical disk. Such operation differs from the claimed invention.

Williams apparently discloses that each new data item is written to a particular physical address and associated with a corresponding logical address. Because the disk is a write-once disk, when data is updated it is written to the next sequential unwritten physical address on the disk. The logical address, however, is maintained for the updated data. Mapping data for the associations between the physical and logical addresses also is stored and updated. When the data is to be read back, the logical address is retrieved along with pointer information to identify the appropriate physical address. (See, e.g., Williams at col. 8, line 58 to col. 9, line 2; Table I.)

Williams apparently also discloses that when a write command is received, a controller first identifies the next sequential non-flawed storage segment for writing the data. The mapping information for the data, including the logical address and pointer information, is recorded in a mapping segment for the data. (See, e.g., Williams at col. 11, line 51 to col. 12, line 4; Fig. 4.) The Examiner equates this operation of Williams to the claimed pseudo-overwrite operation. Applicants dispute this application of Williams.

Similarly to Takano, Williams actually does not disclose or suggest a pseudo-overwrite operation *at all*. Specifically, Williams does not disclose or suggest performing a write operation after receiving instructions to write data to the *same location from which it was read* as claimed. Rather, Williams describes a *pseudo-erasing* technique in which data is written to the next writable address using conventional methods, and a mapping table is used to remap a previously used logical address to a new physical address (thereby "erasing" the data stored in the previous physical address). (See Williams at col. 8, line 58 to col. 9, line 2.) Nothing in this operation constitutes using an instruction to write data to the *same location from which it was read* as claimed. Accordingly, Williams does not disclose or suggest a pseudo-overwrite operation as recited in the amended independent claims, and, therefore, a rejection based on Williams would lack merit.

IV.   *Conclusion*

For the foregoing reasons, claims 1-8 are allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988, Docket No. YAMAP1014US.

Respectfully submitted,

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